## RAILROAD COMMISSION OF TEXAS

### **HEARINGS DIVISION**

| OΠ  | AND | GAS | <b>DOCKET</b> | NO  | 03-02 | 283389 |
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| UIL | ANU | GAS | DUCKET        | NO. | 00-04 | 200000 |

THE APPLICATION OF LINC GULF COAST PETROLEUM, INC. TO ADOPT FIELD RULES FOR THE CEDAR POINT (DEEP FRIO) FIELD, CHAMBERS COUNTY, TEXAS

OIL AND GAS DOCKET NO. 03-0283390

THE APPLICATION OF LINC GULF COAST PETROLEUM, INC. TO ADOPT FIELD RULES FOR THE CEDAR POINT FIELD, CHAMBERS COUNTY, TEXAS

OIL AND GAS DOCKET NO. 03-0283393

THE APPLICATION OF LINC GULF COAST PETROLEUM, INC. TO CONSOLIDATE VARIOUS CEDAR POINT (FRIO) FIELDS AND TO ADOPT FIELD RULES FOR THE PROPOSED CEDAR POINT (UPPER FRIO) FIELD, CHAMBERS COUNTY, TEXAS

OIL AND GAS DOCKET NO. 03-0283394

THE APPLICATION OF LINC GULF COAST PETROLEUM, INC. TO CONSOLIDATE VARIOUS CEDAR POINT (MIOCENE) FIELDS AND TO ADOPT FIELD RULES FOR THE PROPOSED CEDAR POINT (MIOCENE) FIELD, CHAMBERS COUNTY, TEXAS

**HEARD BY:** 

Richard D. Atkins, P.E. - Technical Examiner

Laura Miles-Valdez - Legal Examiner

**HEARING DATE:** 

July 31, 2013

APPEARANCES: REPRESENTING:

APPLICANT:

Flip Whitworth Bryan Lauer John Thibeaux Jordan Broussard Tim Lyons Linc Gulf Coast Petroleum, Inc.

### **EXAMINERS' REPORT AND RECOMMENDATION**

### STATEMENT OF THE CASE

The four subject fields currently operate under Statewide Field Rules. Linc Gulf Coast Petroleum, Inc. ("Linc") requests that Field Rules be adopted for the four subject fields, as shown below:

- 1. Designated correlative interval for the Cedar Point (Miocene) Field from 1,200 feet to 5,200 feet, for the Cedar Point (Upper Frio) Field from 5,200 feet to 6,193 feet, for the Cedar Point (Deep Frio) Field from 6,193 feet to 6,918 feet and for the Cedar Point Field from 6,918 feet to 10,221 feet, as shown on the log of the Standard Oil Company of Texas State Lease, Well No. 1811 (API No. 42-071-03040);
- 2. 150'-0' well spacing;
- 3. 40 acre oil and gas units with the filing of Form P-15 without proration unit plats and optional 20 acre density for the Cedar Point (Miocene) Field;
- Field classification as associated-prorated with gas allocation based on 95% acres and 5% deliverability with AOF status and oil allocation based on 95% acres and 5% per well with a top MER oil allowable based on a fields productivity index.

Linc proposes to consolidate and transfer wells as shown in Attachments A and B and requests that any over-production that may have accrued to either wells or leases in each of the four subject fields be canceled.

The applications are unprotested and the examiners recommend that the various fields be consolidated and Field Rules be adopted for the four subject fields, as requested by Linc.

### **DISCUSSION OF EVIDENCE**

The subject fields were discovered beginning in February 1938. There are two producing gas wells, 13 producing oil wells and three operators carried on the proration schedules. All of the fields operate under Statewide Field Rules. Linc operates most of the wells in the subject fields. The total estimated cumulative production from the Miocene, Upper Frio, Deep Frio and Vicksburg formations through December 2012 is 7.0 BCFG and 11.0 MMBO, 12.0 BCFG and 12.0 MMBO, 1.4 BCFG and 70.0 MBO and 0.5 BCFG and 0.7 MMBO, respectively.

There is currently no defined correlative interval for the four subject fields. Linc requests a designated correlative interval for the Cedar Point (Miocene) Field from 1,200 feet to 5,200 feet, for the Cedar Point (Upper Frio) Field from 5,200 feet to 6,193 feet, for the Cedar Point (Deep Frio) Field from 6,193 feet to 6,918 feet and for the Cedar Point Field from 6,918 feet to 10,221 feet, as shown on the log of the Linc Gulf Coast Petroleum, Inc. (Originally operated by Standard Oil Company of Texas) - State Lease, Well No. 1811 (API No. 42-071-03040), State Tract 118, Galveston Bay, Chambers County, Texas. The correlative interval includes the entire Miocene, Upper Frio, Deep Frio and Vicksburg formations, which extend down to the top of the salt dome. The Cedar Point Field encompasses the entire Vicksburg formation.

The fields are geographically intermingled and there are no other fields contained within the proposed correlative interval. Many of the wells have produced from several different fields and the reservoirs are continuous across the field area. Linc is redeveloping the four subject fields by drilling infill wells and requests Field Rules that will promote the efficient and effective development of the remaining hydrocarbons. Linc has run 3-D seismic and is drilling small fault blocks that are 5 to 25 acres in size. The four subject fields are comprised of sands that have an average porosity between 26 and 30 percent and an average net pay thickness between 15 and 50 feet. The primary drive mechanism in all of the sands is a strong water drive and the fields are in the later stages of primary depletion.

Linc requests 150'-0' well spacing and 40 acre oil and gas units with the filing of Form P-15 without proration unit plats and optional 20 acre density for the Cedar Point (Miocene) Field, which is currently the most densely developed field. The proposed no between well spacing is necessary to allow the drilling of infill wells, which may have to be placed very near existing wells in some cases.

Linc proposes a field classification of associated-prorated with gas allocation based on 95% acres and 5% deliverability with AOF status and oil allocation based on 95% acres and 5% per well with a top MER oil allowable based on a fields productivity index. The productivity index for the Cedar Point (Miocene) Field is 2.4 barrels per one psi of pressure

drop and a 400 psi pressure drawdown would realize a 960 barrels of oil per day MER allowable. The productivity index for the Cedar Point (Upper Frio) Field is 2.2 barrels per one psi of pressure drop and a 500 psi pressure drawdown would realize a 1,100 barrels of oil per day MER allowable. The productivity index for the Cedar Point (Deep Frio) Field is 2.0 barrels per one psi of pressure drop and a 500 psi pressure drawdown would realize a 1,000 barrels of oil per day MER allowable. The productivity index for the Cedar Point Field is 1.1 barrels per one psi of pressure drop and a 500 psi pressure drawdown would realize a 550 barrels of oil per day MER allowable.

Linc requests to consolidate and transfer wells as shown in Attachments A and B and that any over-production that may have accrued to either wells or leases in each of the four subject fields be canceled. Linc also requests that the allocation formulas be suspended, as there is a 100% market demand for all of the gas produced from the four subject fields.

#### FINDINGS OF FACT

- 1. Notice of this hearing was provided to all persons entitled to notice at least ten (10) days prior to the date of the hearing and no protests were received.
- 2. The subject fields were discovered beginning in February 1938.
  - a. There are two producing gas wells, 13 producing oil wells and three operators carried on the proration schedules.
  - b. All of the fields operate under Statewide Field Rules.
  - c. Linc Gulf Coast Petroleum, Inc. ("Linc") operates most of the wells in the subject fields.
- 3. The correlative interval should be defined for the Cedar Point (Miocene) Field from 1,200 feet to 5,200 feet, for the Cedar Point (Upper Frio) Field from 5,200 feet to 6,193 feet, for the Cedar Point (Deep Frio) Field from 6,193 feet to 6,918 feet and for the Cedar Point Field from 6,918 feet to 10,221 feet, as shown on the log of the Linc Gulf Coast Petroleum, Inc. (Originally operated by Standard Oil Company of Texas) State Lease, Well No. 1811 (API No. 42-071-03040), State Tract 118, Galveston Bay, Chambers County, Texas. The correlative interval includes the entire Miocene, Upper Frio, Deep Frio and Vicksburg formations, which extend down to the top of the salt dome. The Cedar Point Field encompasses the entire Vicksburg formation.
- Field Rules for the four subject fields that provide for 150'-0' well spacing, 40 acre oil and gas units and optional 20 acre density for the Cedar Point (Miocene) Field are appropriate for the four subject fields.

- a. Linc is re-developing the four subject fields by drilling infill wells and requests Field Rules that will promote the efficient and effective development of the remaining hydrocarbons.
- b. Linc has run 3-D seismic and is drilling small fault blocks that are 5 to 25 acres in size.
- c. The four subject fields are comprised of sands that have an average porosity between 26 and 30 percent and an average net pay thickness between 15 and 50 feet.
- d. The primary drive mechanism in all of the sands is a strong water drive and the fields are in the later stages of primary depletion.
- e. The proposed no between well spacing is necessary to allow the drilling of infill wells, which may have to be placed very near existing wells in some cases.
- 5. A field classification of associated-prorated with gas allocation based on 95% acres and 5% deliverability and oil allocation based on 95% acres and 5% per well with a top MER oil allowable based on a fields productivity index are reasonable formulas which will protect correlative rights and meet statutory requirements.
- 6. Suspension of the allocation formula is appropriate, as there is a 100% market demand for all of the gas produced from the four subject fields.
- 7. The filing of Form P-15 to designate the number of acres to be assigned to each well for proration purposes with no proration unit plats will eliminate unnecessary paperwork.

### **CONCLUSIONS OF LAW**

- 1. Proper notice of this hearing was issued.
- 2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.
- 3. Consolidation of the subject fields is necessary to prevent waste and protect correlative rights.

- 4. Adopting Field Rules for the four subject fields is necessary to prevent waste, protect correlative rights and promote development of the field.
- 5. Cancellation of all over-production that may have accrued to either wells or leases in each of the four subject fields will not harm correlative rights and will not cause waste.

#### **RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission approve the field consolidation, adopt Field Rules and cancel any over-production for the four subject fields, as requested by Linc Gulf Coast Petroleum, Inc.

Respectfully submitted,

Richard D. Atkins, P.E.

**Technical Examiner** 

Laura Miles-Valdez

Legal Examiner

### ATTACHMENT A

### Cedar Point (Miocene) Field (ID No. 16599 300)

### Fields to be Consolidated:

| Field Name                 | Field No. | <u>Current Field Rules</u> |
|----------------------------|-----------|----------------------------|
| Cedar Point (Miocene A)    | 16599332  | SWR                        |
| Cedar Point (Miocene B-1)  | 16599415  | SWR                        |
| Cedar Point (Miocene D-1)  | 16599498  | SWR                        |
| Cedar Point (Miocence E-1) | 16599581  | SWR                        |
| Cedar Point (Miocene 1F)   | 16599600  | SWR                        |
| Cedar Point (Miocene G-4)  | 16599664  | SWR                        |
| Cedar Point (Miocene 2500  | 16599700  | SWR                        |
| Cedar Point (Miocene 2760) | 16599747  | SWR                        |
| Cedar Point (Miocene 2900) | 16599830  | SWR                        |
| Cedar Point (Miocene 3050) | 16599850  | SWR                        |
| Cedar Point (Miocene 4100) | 16599913  | SWR                        |
|                            |           |                            |

### Wells to be Transferred Without Fees:

| Well No. | <u>Lease/ID No.</u>  | <u>API No.</u>  |
|----------|--|---|
| 1        | 00626  | 071-32183   |
| 81       | 00626  | 071-32382   |
| 184      | 00626  | 071-03047   |
| 1811     | 00626  | 071-03040   |
| 1815     | 00626  | 071-03022   |
| 1817M    | 00626  | 071-03182   |
| 1825     | 00626  | 071-03025   |
| 1841     | 00626  | 071-03036   |
| 1842     | 00626  | 071-03032   |
| 1871     | 00626  | 071-30104   |
| 1872     | 00626  | 071-30130   |
| 1873     | 00626  | 071-30163   |
| 1874L    | 00626  | 071-30279   |
| 1874U    | 00626  | 071-30279   |
| 1877     | 00626  | 071-32310   |
| 1878     | 00626  | 071-32315   |
| 1911     | 00626  | 071-03053   |
| 1817MU   | 033730   | 071-03182   |
| 182      | 177928   | 071-03042   |
|          | 81<br>184<br>1811<br>1815<br>1817M<br>1825<br>1841<br>1842<br>1871<br>1872<br>1873<br>1874L<br>1874U<br>1877<br>1878<br>1911<br>1817MU | 1 00626 81 00626 184 00626 1811 00626 1815 00626 1817M 00626 1825 00626 1841 00626 1842 00626 1871 00626 1872 00626 1873 00626 1874L 00626 1874U 00626 1877 00626 1878 00626 1911 00626 1817MU 033730 |

### ATTACHMENT B

## Cedar Point (Upper Frio) Field (ID No. 16599 950)

| -    |      | 4  |    | A   | 1   | : -1 | -4- | _1 - |
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| Field Name                     | Field No. | <u>Current Field Rules</u> |
|--------------------------------|-----------|----------------------------|
| Cedar Point (Frio Middle)      | 16599083  | SWR                        |
| Cedar Point (Frio Stray Upper) | 16599100  | SWR                        |
| Cedar Point (Frio 1)           | 16599166  | SWR                        |

### Wells to be Transferred Without Fees:

| Lease Name               | Well No. | <u>Lease/ID No.</u> | <u>API No.</u> |
|--------------------------|----------|---------------------|----------------|
| State                    | 1844     | 00626               | 071-03019      |
|                          | 1962     | 11952               | 071-03058      |
| State<br>Cedar Point SWD |          | 171804              | 071-32076      |
| Occur i Ollic Offic      | •        |                     |                |